

MG Checklist

Spencer Smith

September 27, 2025

- Follows writing checklist (full checklist provided in a separate document)
 - ☐ L^AT_EX points
 - ☐ Structure
 - ☐ Spelling, grammar, attention to detail
 - ☐ Avoid low information content phrases
 - ☐ Writing style
 - ☐ Hyperlinks should be done properly (`\ref`)
- Module Decomposition
 - ☐ One module one secret (unless an explicit exception is made, with a good reason) - all “and”s should be checked.
 - ☐ The uses relation is a hierarchy.
 - ☐ Secrets are nouns (generally).
 - ☐ Traceability matrix between modules and requirements shows every requirement is satisfied by at least one module
 - ☐ Traceability matrix between modules and requirements shows that every module is used to satisfy at least one requirement
 - ☐ Traceability matrix between likely changes and modules shows a one to one mapping, or, if this is not the case, explains the exceptions to this rule.
 - ☐ Level 1 of the decomposition by secrets shows: Hardware-Hiding, Behaviour-Hiding and Software Decision Hiding.

- ☐ Behaviour-Hiding modules are related to the requirements
 - ☐ Software-Decision hiding modules are concepts that need to be introduced, but are not detailed in the requirements
 - ☐ Each Software Decision Hiding module is used by at least one Behaviour-Hiding Module (if this isn't the case, an explanation should be provided)
 - ☐ Uses relation is not confused with a data flow chart. If you can imagine an "import B" statement in the code for module A, then module A uses module B.
 - ☐ The arrow in the uses relation points from module A to module B when module A uses module B
 - ☐ Anticipated changes are a superset of the likely changes in the SRS
 - ☐ If there is a "control" module, it should be at the top of the hierarchy
 - ☐ Ideally the uses relation is drawn with all uses arrows pointing down, with clear layers for the hierarchy
- MG quality
 - ☐ Follow template
 - ☐ Low coupling
 - ☐ Satisfies information hiding
 - ☐ Figures can be zoomed in on (pdf better than bitmap for zooming)